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EXAMINER

SHIMIZU, MATSUICHIRO

ART UNIT PAPER NUMBER

2635

DATE MAILED: 07/16/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/524,804

Applicant(s)

TUTTLE, MARK E.

Examiner

Matsuichiro Shimizu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 50-52,54-69 and 71-100 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 50-52,54-69 and 71-100 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Response to Arguments

The examiner is issuing a non-final Office Action to correct the deficiencies of the non-final Office Action filed on 1/2/2003.

Applicant's arguments with respect to claims 83, 87, 89, 91, 93, 95, 97, 99-100 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's argument (lines 5-10, 12-16, page 5; lines 10-11 and 15-16, page 9), Walton discloses a method of forming a radio frequency identification device comprising: providing radio frequency identification circuitry device configured to communicate wireless signals (col. 6, lines 1-53, radio frequency identifier circuit is associated with identifier circuit 212 coupled to radio frequency flux) cited in claims 50, 65, 66, 79 and 82.

Regarding applicant's argument (lines 8-11, 18-19, page 6; lines 1-4 and 21-23, page 8; lines 4-6, page 9), Walton teaches a perimetral edge have thickness less than a smallest dimension of the perimetral edge and the encapsulant includes visibly perceptible indicia intermediate the upper surface and the lower surface and encapsulant which contacts the communication circuitry (Fig. 6, col. 6, lines 44-53, perimetric edge, encapsulant, printed label along face including barcode (612)) cited in claims 51, 54, 59, 61 and 65, 76.

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Regarding applicant's argument (lines 11-18, page 7), Odagiri discloses, in the art of rfid system, portable communication device with a battery coupled with the communication circuitry (col. 6, lines 41-51, power source enough to run motor within wireless environment) for the purpose of providing additional power supply. That is, both Walton and Odagiri address the selective call portable system, and they are combinable to teach a battery coupled with the communication circuitry.

Rejections – 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 82, 50-51, 54-56, 58-59, 61, 65-68, 71-73, 75-76, 78 are rejected under 35 U.S.C. 102(b) as being anticipated by Walton (4,782,342).

Regarding claim 82, Walton discloses a method of forming a radio frequency identification device comprising: providing radio frequency identification circuitry

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device configured to communicate wireless signals (col. 6, lines 1–53, radio frequency identifier circuit); coupling a power source (col. 6, lines 1–53, radio frequency identifier circuit energized by varying magnetic field) with the radio frequency identification device circuitry (col. 6, lines 1–53, radio frequency identifier circuit); coupling an antenna with the rfid device (col. 4, lines 50–65, identifier antenna (214); col. 6, lines 1–53, radio frequency identifier circuit energized by varying magnetic field) providing a housing (Fig. 6, housing (610)); and providing visibly perceptible indicia on the at least one side surface (Fig. 6, printed label along face including barcode (612)).

All subject matters in claims 50–51, 66–68 are disclosed in claim 82, and therefore, rejections of the subject matters expressed in claims 50, 53, 66 – 68 are met by references and associated arguments applied to rejections of claim 82.

Regarding claim 54, Walton teaches a wireless communication device (col. 6, lines 1–53, radio frequency identifier circuit) comprising: a substrate having a support surface defined by a perimetral edge (Fig. 6, col. 6, lines 1–53, printed label or indicia on the side); communication circuitry (Fig. 6, col. 6, lines 1–53, radio frequency identifier circuit 212 on the housing) elevationally over the support surface (Fig. 6, col. 6, lines 1–53, radio frequency identifier circuit 212 on the side) of the substrate and configured to communicate wireless signals; and an encapsulant (Fig. 6, col. 6, lines 1–

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53, radio frequency identifier circuit 212 on the lower surface) elevationally over the support surface and configured to encapsulate (Fig. 6, col. 6, lines 1–53, to enclose the portion of upper surface) at least portions of the support surface of the substrate and the communication circuitry, and wherein the encapsulant and the substrate respectively define an upper surface and a lower surface and have a thickness less than a smallest dimension of the perimetral edge, and the encapsulant (Fig. 6, col. 6, lines 1–53, housing and substrate including indicia on side) includes visibly perceptible indicia intermediate the upper surface and the lower surface.

Regarding claim 55–56 and 58, Walton teaches a rectangle shape, the encapsulant contacts at least portions of the support surface and the communication circuitry; and rfid (Fig. 6, note; rectangle shape, upper portion of lower surface with circuitry, and rfid 212),

Regarding claims 59, 61, 76 and 78, Walton discloses a radio frequency identification device circuit (col. 6, lines 1–53, radio frequency identifier circuit) comprising: communication circuitry (col. 6, lines 1–53, radio frequency identifier circuit) with indicia there on (Fig. 6, PRINTED LABEL surface including barcode (612)); and an encapsulant configured to encapsulate and contact at least a portion of the communication circuitry, wherein the encapsulant defines at least one side surface and

the at least one side surface has visibly perceptible information thereon (Fig. 6, col. 6, lines 44-53, the assembly is encapsulated in a plastic rectangular bar (610); Fig. 6, PRINTED LABEL surface including barcode (612)).

All subject matters in claims 65 are disclosed in claim 59, 61, and therefore, rejections of the subject matters expressed in claims 65 are met by references and associated arguments applied to rejections of claims 59, 61.

All subject matters in claims 71-73 and 75 are disclosed in claims 54-56 and 58, and therefore, rejections of the subject matters expressed in claims 71-73 and 75 are met by references and associated arguments applied to rejections of claims 54-56 and 58.

Claim Rejections – 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 65-66 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Walton.

All subject matters except the matter of a power source and antenna elevationally over the support surface in claim 65 are disclosed in claim 54. However, Lebby discloses, in the art of portable wireless communication device, a power source and antenna (Fig. 6, col. 6, line 58 to col. 7, line2) for the purpose of providing longer operation and optimum design, and one of ordinary skill in the art recognizes a power source and antenna elevationally over the support surface is matter of shifting the position without compromising the functionality and is a matter of design choice leading to experimentally the best design. Therefore, it would have been obvious to a person at the time of invention to include the matter of a power source and antenna elevationally over the support surface in the device of Walton because one of ordinary skill in the art recognizes a power source and antenna elevationally over the support surface is a matter of design choice leading to experimentally the best design. Therefore, rejections of the subject matters expressed in claim 65 are met by references and associated arguments applied to rejections of claim 54 and to rejection provided in the above the paragraph.

All subject matter in claims 66 is disclosed in claim 65 and therefore, rejections of the subject matters expressed in claim 66 are met by references and associated arguments applied to rejections of claim 65.

Claims 84, 92, 88, 94 and 96 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Walton in view of Odsgiri (5,801,466).

Regarding claim 84, 92, 88, 94 and 96, Walton continues, as disclosed in claims 50, 59, 76, 66 and 71, to disclose passive energy supply to the communication

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circuitry. But Walton does not disclose a battery coupled with the communication circuitry .

However, Odagiri discloses, in the art of rfid system, portable communication device with a battery coupled with the communication circuitry (col. 6, lines 41-51, power source enough to run motor within wireless environment) for the purpose of providing additional power supply. Therefore, it would have been obvious to a person at the time of invention to include a battery coupled with the communication circuitry in the device of Walton as evidenced by Odagiri because Walton suggests a passive power supply and Odagiri teaches a battery coupled with the communication circuitry (col. 6, lines 41-51, power source enough to run motor within wireless environment) for the purpose of providing additional power supply.

Claims 52, 57, 60, 62-64, 69, 74, 77 , 79 and 80-81 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Walton in view of Lebby et al. (5,493,437).

Regarding claims 52, 57, 60, 62-64, 69, 74 and 77, Walton continues, as disclosed in claims 50, 54, 59, 66, 71 and 76, to disclose a housing comprising thin side surface (Fig. 6, rectangular plastic housing (610)). But Walton does not disclose the housing comprises the at least one side surface has a dimension less than about 100 mills.

However, Lebby discloses, in the art of portable wireless communication device, the housing comprises the at least one side surface has a dimension less than about

100 mills (Fig. 1, casing thickness of 1 MM) to provide smaller and ruggedized structure. Therefore, it would have been obvious to a person at the time of invention to include the housing comprises one surface has a dimension less than about 100 mills in the device of Walton as evidenced by Lebby because Walton suggests a housing containing a thin side surface and Lebby teaches the housing comprises one surface has a dimension less than about 100 mills to provide smaller and ruggedized structure.

All subject matters except the housing comprises one surface have a dimension less than about 100 mills in claims 62 and 79 are disclosed in claims 50. However, Lebby discloses, in the art of portable wireless communication device, the housing comprises the at least one side surface has a dimension less than about 100 mills (Fig. 1, casing thickness of 1 MM) to provide smaller and ruggedized structure. Therefore, it would have been obvious to a person at the time of invention to include the housing comprises one surface has a dimension less than about 100 mills in the device of Walton as evidenced by Lebby because Walton suggests a housing containing a thin side surface and Lebby teaches the housing comprises one surface has a dimension less than about 100 mills to provide smaller and ruggedized structure. Therefore, rejections of the subject matters expressed in claims 62 and 79 are met by references and associated arguments applied to rejections of claim 50 and to rejection provided in the above the paragraph.

Regarding claim 63, Walton in continues, as disclosed in claim 62, to disclose the housing comprises an encapsulant which contacts at least portions of the support surface and the

communication circuitry (Fig. 6, col. 6, lines 8–54, the assembly is encapsulated in a plastic rectangular bar (610); note antenna rod (216) and identifier circuit (212)).

Regarding claim 64, Walton in continues, as disclosed in claim 62, to disclose the device further comprising an antenna within the housing and coupled with the communication circuitry (Fig. 6, col. 6, lines 8–54, the assembly is encapsulated in a plastic rectangular bar (610); note encapsulated antenna rod (216) energizes the identifier circuit (212) and the identifier circuit is activated).

All subject matters in claims 80–81 are disclosed in claims 50 and 79, and therefore, rejections of the subject matters expressed in claims 80–81 are met by references and associated arguments applied to rejections of claims 50 and 79.

Claims 89 and 97 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Walton in view of Lebby et al. (5,493,437) as applied to claims 79 above, and further in view of MacLellan et al. (5,649,296).

Regarding claims 89, 97, Walton continues, as disclosed in claims 79, 62 to disclose the communication circuitry is RFID receiver. But Walton in view of Lebby does not disclose the communication circuitry is configured to implement backscatter communications.

However, MacLellan discloses, in the art of wireless communication system, the communication circuitry is configured to implement backscatter communications (col. 1, line 61

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to col. 4, line 51, backscatter modulation applies to RFID) to better comply the FCC regulatory requirement. Therefore, it would have been obvious to a person at the time of invention to include the communication circuitry is configured to implement backscatter communications in the device of Walton in view of Lebby as evidenced by MacLellan because Walton in view of Lebby suggests the communication circuitry is RFID receiver and MacLellan teaches the communication circuitry is configured to implement backscatter communications to better comply the FCC regulatory requirement.

Claims 86, 90 and 98 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walton in view of Lebby et al. (5,493,437) as applied to claims 54, 62 and 79 above, and further in view of Odsgiri (5,801,466).

Regarding claims 86, 90 and 98, Walton continues, as disclosed in claims 54, 62 and 79 to disclose passive energy supply to the communication circuitry. But Walton in view of Lebby does not disclose a battery coupled with the communication circuitry.

However, Odagiri discloses, in the art of portable communication device a battery coupled with the communication circuitry (col. 6, lines 41-51, power source enough to run motor within wireless environment) to provide power. Therefore, it would have been obvious to a person at the time of invention to include a battery coupled with the communication circuitry in the device of Walton in view of Lebby as evidenced by Odagiri because Walton in view of Lebby suggests passive energy supply to the communication circuitry and Odagiri teaches a battery coupled with the

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communication circuitry (col. 6, lines 41–51, power source enough to run motor within wireless environment) for the purpose of higher transmission power.

Claims 83, 85, 91, 93, 87, 95 and 99–100 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walton in view of MacLellan (5,649,296).

Regarding claims 83, 91, 93, Walton continues, as disclosed in claims 50, 66, 71 to disclose the communication circuitry is RFID receiver. But MacLellan does not disclose the communication circuitry is configured to implement backscatter communications.

However, MacLellan discloses, in the art of wireless communication system, the communication circuitry is configured to implement backscatter communications (col. 1, line 61 to col. 4, line 51, backscatter modulation applies to RFID) to better comply the FCC regulatory requirement. Therefore, it would have been obvious to a person at the time of invention to include the communication circuitry is configured to implement backscatter communications in the device of Walton as evidenced by MacLellan because Walton suggests the communication circuitry is RFID receiver and MacLellan teaches the communication circuitry is configured to implement backscatter communications to better comply the FCC regulatory requirement.

Regarding claims 85, 87 and 95, Walton continues, as disclosed in claims 54, 59 and 76 to disclose the communication circuitry is pager receiver. But Walton does not disclose the communication circuitry is configured to implement backscatter communications.

However, MacLellan discloses, in the art of credit card pager system, the communication circuitry is configured to implement backscatter communications (col. 1, line 61 to col. 4, line 51, backscatter modulation applies to RFID) to better comply the FCC regulatory requirement. Therefore, it would have been obvious to a person at the time of invention to include the communication circuitry is configured to implement backscatter communications in the device of Walton as evidenced by MacLellan because Walton suggests the communication circuitry is radio frequency identifier device and MacLellan teaches the communication circuitry is configured to implement backscatter communications to better comply the FCC regulatory requirement.

Regarding claims 99-100, Walton discloses a wireless communication device (Figs. 4 and 6, col. 6, lines 8-23 and 44-53, identifier circuit (212) associated with radio frequency identification device) comprising: a housing (Fig. 6, plastic rectangular bar (610)) including an upper surface, a lower surface, and at least one side intermediate the upper surface and the lower surface and having a dimension less than smallest dimensions of the upper surface and the lower surface, and the at least one side surface having visibly perceptible indicia (Fig. 6, a side surface with written identification along with a bar code (612)) thereon; and communication circuitry (Fig. 6, identifier circuit (212)) within the housing and the communication circuitry being

configured to communicate wireless signals. But Walton does not disclose the communication circuitry is configured to implement backscatter communications.

However, MacLellan discloses, in the art of radio frequency communication system, the communication circuitry is configured to implement backscatter communications (col. 1, line 61 to col. 4, line 51, backscatter modulation applies to RFID) to better comply the FCC regulatory requirement. Therefore, it would have been obvious to a person at the time of invention to include the communication circuitry is configured to implement backscatter communications in the device of Walton as evidenced by MacLellan because Walton suggests the communication circuitry is radio frequency identification and MacLellan teaches the communication circuitry is configured to implement backscatter communications to better comply the FCC regulatory requirement.

Contact Information

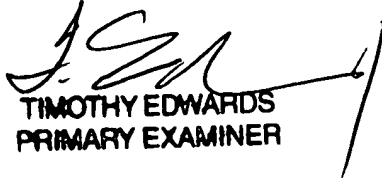
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matsuichiro Shimizu whose telephone number is (703) 306-5841. The examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Micheal Horabik, can be reached on (703-305-4704). The fax phone number for the organization where this application or proceeding is assigned is (703-305-3988).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-8576).

Matsuichiro Shimizu

July 13, 2002


TIMOTHY EDWARDS
PRIMARY EXAMINER